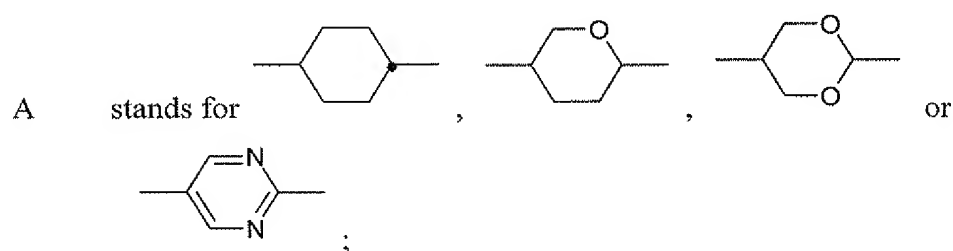


Listing of Claims:


- $$R^{11}-A_a-Z^{11}-\begin{array}{c} \text{O} \\ \diagup \quad \diagdown \\ \text{---} \quad \text{W} \text{---} B_b-D_d-Y^{11} \\ \diagdown \quad \diagup \\ Y^{12} \quad Y^{13} \end{array} \quad (I)$$

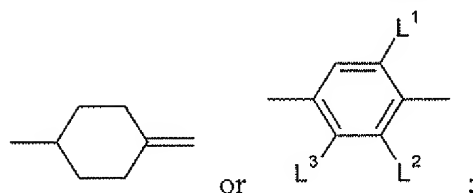
R¹¹ denotes H, F, Cl, Br, I, CN, aryl, heterocyclyl or a halogenated or unsubstituted alkyl radical having 1 to 15 carbon atoms, ~~where, in addition, in which~~ one or more CH₂ groups ~~in this radical may each be~~ are optionally replaced, independently of one another, by -C≡C-, -CH=CH-, -O-, -CO-, -CO-O- or -O-CO- in such a way that O atoms are not linked directly to one another;



Z¹¹ represents a single bond, -CH₂-CH₂-, -CF₂-CF₂-, -CF₂-CH₂-, -CH₂-CF₂-, -CH₂-O-, -O-CH₂-, -CF₂-O- or -O-CF₂-;

MERCK-3017

B and D, independently of one another, stand for ,



b and d, independently of one another, are 0 or 1;

Y^{11} denotes $=O$, $=C(SR^{12})(SR^{13})$, $=CF_2$, $-H$, $-F$, $-Cl$, $-Br$, $-I$, $-CN$, $-OH$, $-SH$, $-CO-R^{14}$, $-OSO_2R^{15}$, $-C(=S^+R^{12})(-SR^{13})X^-$, $-B(OR^{16})(OR^{17})$, $-BF_3^-Cat^+$, $-Si(OR^{18})(OR^{19})(OR^{20})$ or alkyl, where alkyl denotes a halogenated or unsubstituted alkyl radical having 1 to 15 C atoms, in which, ~~in addition,~~ one or more CH_2 groups ~~may each be~~ are optionally replaced, independently of one another, by $-C\equiv C-$, $-CH=CH-$, $-O-$, $-CO-$, $-CO-O-$ or $-O-CO-$ in such a way that O atoms are not linked directly to one another;

Y^{12} and Y^{13} , independently of one another, denote H or alkyl, where alkyl denotes a halogenated or unsubstituted alkyl radical having 1 to 15 C atoms, in which, ~~in addition,~~ one or more CH_2 groups ~~may each be~~ are optionally replaced, independently of one another, by $-C\equiv C-$, $-CH=CH-$, $-O-$, $-CO-$, $-CO-O-$ or $-O-CO-$ in such a way that O atoms are not linked directly to one another;

L^1 , L^2 and L^3 , independently of one another, denote H or F;

R^{12} and R^{13} , independently of one another, denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(CH_2)_p-$ unit, where $p = 2, 3, 4, 5$ or 6 , where one, two or three of these CH_2 groups ~~may be~~ are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms;

R^{14} denotes OH, O-aryl, O-aralkyl, O-alkyl, Cl, Br, aryl, aralkyl or alkyl;

R^{15} denotes aryl, aralkyl or a halogenated or unsubstituted alkyl radical having 1 to 15 carbon atoms, ~~where, in addition, in which alkyl radical~~ one or more CH_2 groups in this alkyl radical may each be are optionally replaced, independently of one another, by $-C\equiv C-$, $-CH=CH-$, $-O-$, $-CO-$, $-CO-O-$ or $-O-CO-$ in such a way that O atoms are not linked directly to one another;

R^{16} and R^{17} denote H or an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(CH_2)_p-$ unit, where $p = 2, 3, 4, 5$ or 6, where one, two or three of these CH_2 groups ~~may be~~ are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms;

R^{18} , R^{19} and R^{20} , independently of one another, denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms;

Cat^+ is an alkali metal cation or a quaternary ammonium cation;

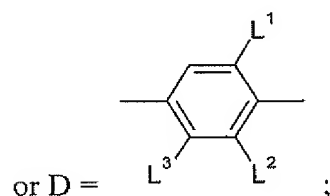
and

X^- is a weakly coordinating anion;

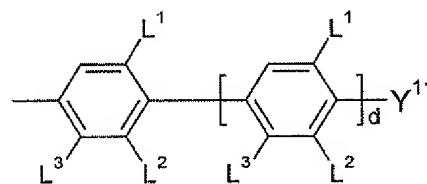
with the proviso

that W denotes $>CH-$ if $b+d \neq 0$;

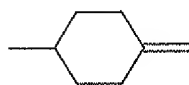
that Y^{11} does not denote $=O$, $=C(SR^{12})(SR^{13})$ or $=CF_2$ if Y^{11} is connected to B



that Y^{11} denotes $-H$, $-I$, $-OH$, $-SH$, $-CO_2R^{14}$, $-OSO_2R^{15}$, $-C(=S^+R^{12})(SR^{13})X^-$, $-B(OR^{16})(OR^{17})$, $-BF_3^-Cat^+$, $-Si(OR^{18})(OR^{19})(OR^{20})$ or alkyl, where alkyl denotes a halogenated or unsubstituted alkyl radical having 1 to 15 C atoms, in which one or more CH_2 groups have each been replaced, independently of one another, by $-C\equiv C-$, $-CH=CH-$, $-O-$, $-CO-$, $-CO-O-$ or $-O-CO-$ in such a way that O atoms are not linked directly to one another and alkyl does not stand for

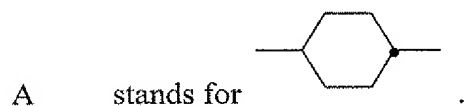


alkoxy, if W is connected directly to d is 0 or 1;



that B does not stand for if $d = 1$; and
that A can adopt identical or different meanings if a is 2.

2. (Withdrawn and Currently Amended) Compound A compound according to Claim 1, characterised in that wherein



3. (Currently Amended) Compound A compound according to Claim 1, characterised in that wherein

a is 0.

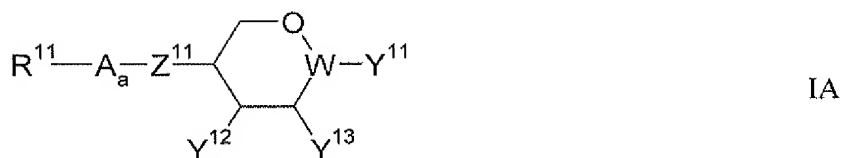
4. (Currently Amended) Compound A compound according to Claim 1, characterised in that wherein

Y^{12} and Y^{13} denote H.

5. (Currently Amended) Compound A compound according to Claim 1, characterised in that wherein

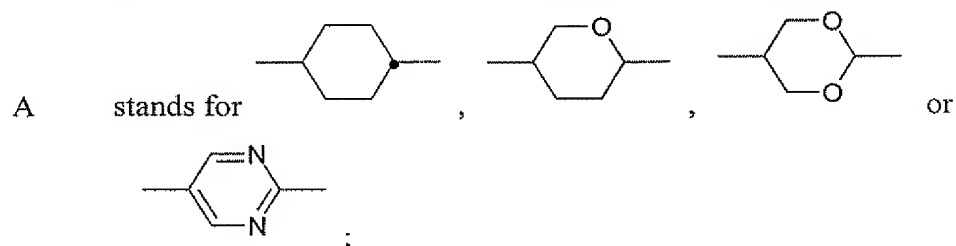
Z^{11} represents a single bond, $-CF_2O-$ or $-OCF_2-$.

6. (Currently Amended) ~~Compound A~~ compound according to Claim 1,
~~characterised in that wherein~~
 R^{11} denotes an unbranched halogenated or unsubstituted alkyl radical
having 1 to 7 carbon atoms.
7. (Withdrawn and Currently Amended) ~~Compound A~~ compound according to
Claim 1, ~~characterised in that wherein~~
 Y^{11} denotes $=O$, $=C(SR^{12})(SR^{13})$ or $=CF_2$.
8. (Currently Amended) ~~Compound A~~ compound according to Claim 1,
~~characterised in that wherein~~
 Y^{11} denotes $-H$, $-F$, $-Cl$, $-Br$, $-I$, $-OH$, $-CO_2H$, $-C(=S^+R^{12})(-SR^{13})X^-$,
 $-B(OR^{16})(OR^{17})$, $-BF_3^-Cat^+$ or $-Si(OR^{18})(OR^{19})(OR^{20})$.
9. (Withdrawn and Currently Amended) ~~Compound A~~ compound according to
Claim 1, ~~characterised in that wherein~~
 X^- denotes BF_4^- , $CF_3SO_3^-$, $C_4F_9SO_3^-$, PF_6^- , SbF_6^- or AsF_6^- .
10. (Currently Amended) ~~Compound A~~ compound according to Claim 1,
~~characterised in that wherein~~
b is 0 and d is 0.
11. (Currently Amended) ~~Compound A~~ compound according to Claim 1,
~~characterised in that wherein~~
b is 1 and d is 0.
12. (Withdrawn and Currently Amended) ~~Compound A~~ compound according to
Claim 1, ~~characterised in that wherein~~
b is 1 and d is 1.
13. (Withdrawn and Currently Amended) ~~Process A~~ process for the ~~preparation of~~
a preparing a compound of claim 1, which is a compound of the formula IA



in which

R^{11} denotes H, F, Cl, Br, I, CN, aryl, heterocyclyl or alkyl;



a is 0, 1 or 2, where A can adopt identical or different meanings if a is 2;

Z^{11} represents a single bond, $-\text{CH}_2-\text{CH}_2-$, $-\text{CF}_2-\text{CF}_2-$, $-\text{CF}_2-\text{CH}_2-$, $-\text{CH}_2-\text{CF}_2-$, $-\text{CH}_2-\text{O}-$, $-\text{O}-\text{CH}_2-$, $-\text{CF}_2-\text{O}-$ or $-\text{O}-\text{CF}_2-$;

W denotes $>\text{C}=\text{}$;

Y^{11} denotes $=\text{O}$, $=\text{C}(\text{SR}^{12})(\text{SR}^{13})$ or $=\text{CF}_2$;

Y^{12} and Y^{13} , independently of one another, denote H or alkyl; and

R^{12} and R^{13} , independently of one another, denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(\text{CH}_2)_p$ -unit, where $p = 2, 3, 4, 5$ or 6 , where one, two or three of these CH_2 groups ~~may be~~ are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms;

~~characterised in that comprising~~

reacting a compound of ~~the~~ formula II



in which R^{11} , A, a and Z^{11} are as defined above for the compound of formula IA, ~~is reacted~~

in a reaction step (A1)

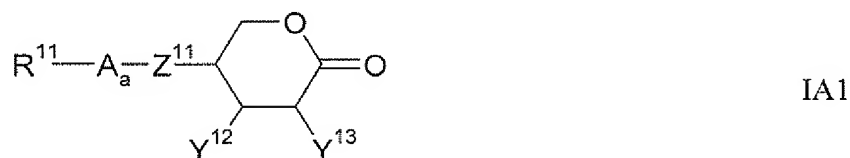
(A1) in the presence of a base with a compound of ~~the~~ formula III



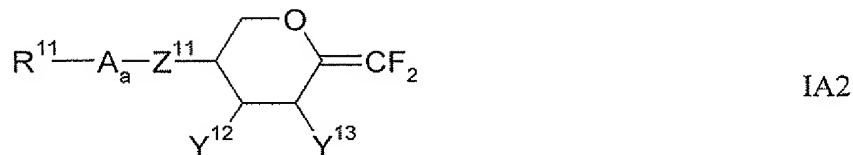
in which Y^{12} and Y^{13} are as defined above for the compound of formula IA,
and R^{31} denotes an alkyl radical having 1 to 15 carbon atoms,
to give a compound of the formula IV



in which R^{11} , A, a, Z^{11} , Y^{12} and Y^{13} are as defined above for the compound of
formula IA, and R^{31} is as defined above for the compound of formula III;
and subsequently converting, in a reaction step (A2),
(A2) the compound of the formula IV ~~is converted~~ into the a compound of
formula IA1

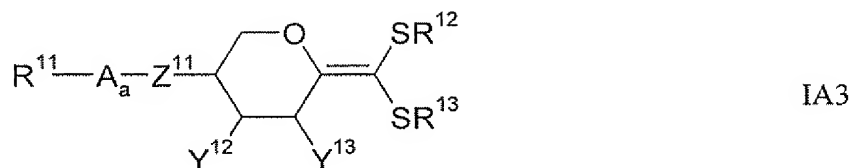


and optionally converting, in a reaction step (A3),
(A3) the compound of the formula IA1 ~~is converted~~ into the a compound of
formula IA2



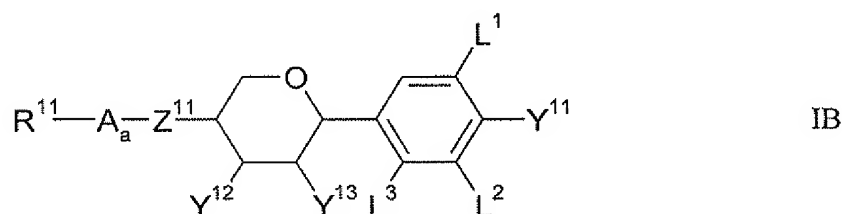
by reaction with CF_2Br_2 in the presence of $\text{P}(\text{N}(\text{R}^{21})_2)_3$, $\text{P}(\text{N}(\text{R}^{21})_2)_2(\text{OR}^{22})$ or
 $\text{P}(\text{N}(\text{R}^{21})_2)(\text{OR}^{22})_2$, where R^{21} and R^{22} , independently of one another, denote an
alkyl radical having 1 to 15 carbon atoms;
or optionally converting, in a reaction step (A3'),
(A3') the compound of the formula IA1 ~~is converted~~ into the a compound of

formula IA3



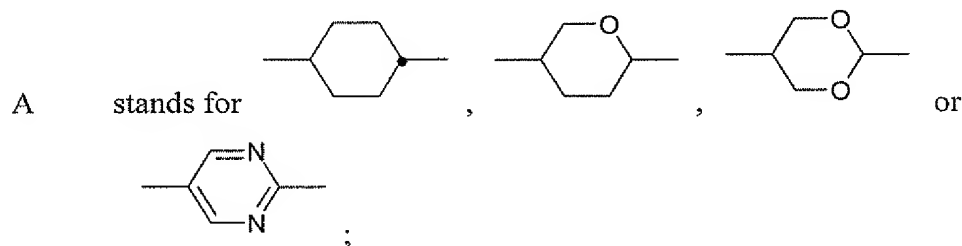
by reaction with $\text{CHG}(\text{SR}^{12})(\text{SR}^{13})$, in which G denotes $\text{P}(\text{OCH}_2\text{R}^{23})_3$, where R^{23} is a perfluorinated alkyl radical having 1 to 5 carbon atoms, or $\text{Si}(\text{CH}_3)_3$ or $\text{Si}(\text{CH}_2\text{CH}_3)_3$, and R^{12} and R^{13} are as defined above for the compound of formula IA, in the presence of a strong base.

14. (Withdrawn and Currently Amended) Process for the preparation of a A process for preparing a compound of claim 1, which is a compound of the formula IB



in which

R^{11} denotes H, F, Cl, Br, I, CN, aryl, heterocyclyl or alkyl;



a is 0, 1 or 2, where A can adopt identical or different meanings if a is 2;

Z^{11} represents a single bond, $-\text{CH}_2-\text{CH}_2-$, $-\text{CF}_2-\text{CF}_2-$, $-\text{CF}_2-\text{CH}_2-$, $-\text{CH}_2-\text{CF}_2-$, $-\text{CH}_2-\text{O}-$, $-\text{O}-\text{CH}_2-$, $-\text{CF}_2-\text{O}-$ or $-\text{O}-\text{CF}_2-$;

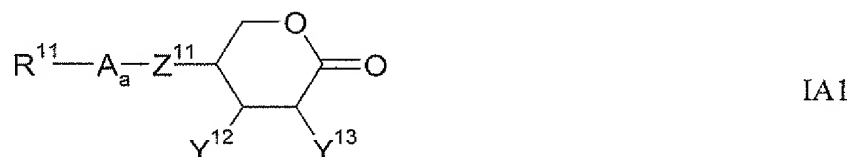
Y^{11} denotes -H, -F, -Cl, -Br, -I, -CN, -OH or $-\text{B}(\text{OR}^{16})(\text{OR}^{17})$;

Y^{12} and Y^{13} , independently of one another, denote H or alkyl;

L^1 , L^2 and L^3 , independently of one another, denote H or F; and

R^{16} and R^{17} , independently of one another, denote H or an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a

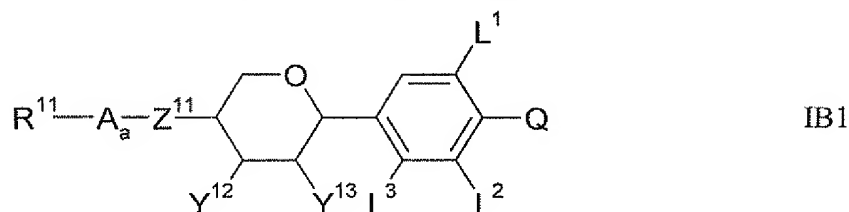
-(CH₂)_p- unit, where p = 2, 3, 4, 5 or 6, where one, two or three of these CH₂ groups ~~may be~~ are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms; ~~characterised in that, comprising~~ reacting, in a reaction step (B1),
(B1) a compound of the formula IA1



in which R¹¹, A, a, Z¹¹, Y¹² and Y¹³ are as defined above for the compound of formula IB, ~~is reacted~~ with a compound of the formula V

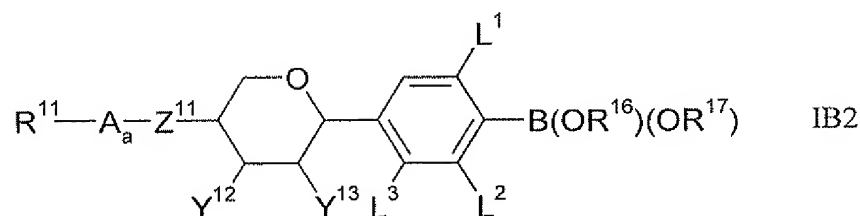


in which L¹, L² and L³ are as defined above for the compound of formula IB, M denotes Li, Cl-Mg, Br-Mg or I-Mg, and Q denotes H, F, Cl, Br, I or CN, with formation of ~~the a~~ compound of the formula IB1



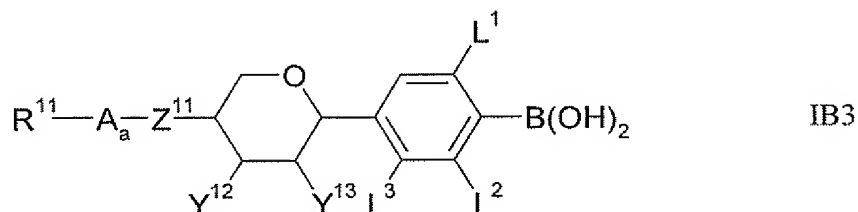
in which R¹¹, A, a, Z¹¹, Y¹², Y¹³, L¹, L² and L³ are as defined for the compound of formula IB, and Q is as defined for the compound of formula V; and optionally reacting, in a reaction step (B2),
(B2) the compound of the formula IB1 in which Q denotes Br ~~is reacted~~ with B(OR¹⁶)(OR¹⁷)(OR²⁴), where R¹⁶, R¹⁷ and R²⁴ are an unbranched or

branched alkyl radical having 1 to 15 carbon atoms, or with $\text{HB}(\text{OR}^{16})(\text{OR}^{17})$, where R^{16} and R^{17} denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(\text{CH}_2)_p-$ unit, where $p = 2, 3, 4, 5$ or 6 , where one, two or three of these CH_2 groups ~~may be~~ are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms, in the presence of an alkyllithium base, to give ~~the a~~ a compound of the formula IB2



and optionally converting, in a reaction step (B3),

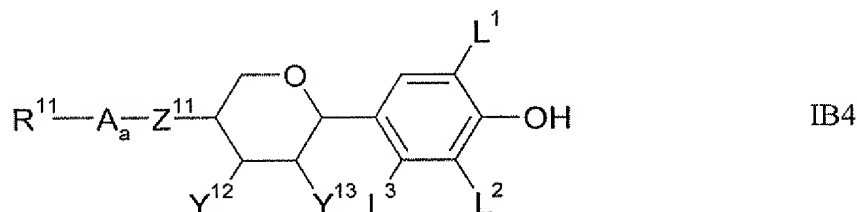
(B3) the compound of formula IB2 is converted into ~~the a~~ a compound of formula IB3



by reaction with an aqueous acid;

and/or optionally converting, in a reaction step (B4),

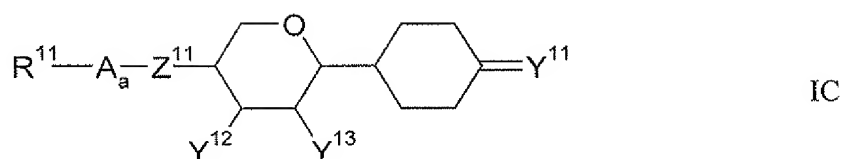
(B4) the compound of formula IB2 or the compound of formula IB3 is ~~converted into the a~~ a compound of formula IB4



by reaction with hydrogen peroxide in alkaline or acidic solution.

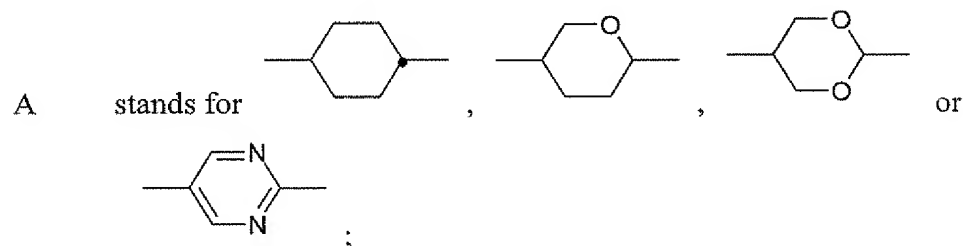
15. (Withdrawn and Currently Amended) ~~Process for the preparation of a A~~
process for preparing a compound of claim 1, which is a compound of the

general formula IC



in which

R^{11} denotes H, F, Cl, Br, I, CN, aryl, heterocyclyl or alkyl;



a is 0, 1 or 2, where A can adopt identical or different meanings if a is 2;

Z^{11} represents a single bond, $-\text{CH}_2-\text{CH}_2-$, $-\text{CF}_2-\text{CF}_2-$, $-\text{CF}_2-\text{CH}_2-$, $-\text{CH}_2-\text{CF}_2-$, $-\text{CH}_2-\text{O}-$, $-\text{O}-\text{CH}_2-$, $-\text{CF}_2-\text{O}-$ or $-\text{O}-\text{CF}_2-$;

Y^{11} denotes $=\text{O}$, $=\text{C}(\text{SR}^{12})(\text{SR}^{13})$ or $=\text{CF}_2$;

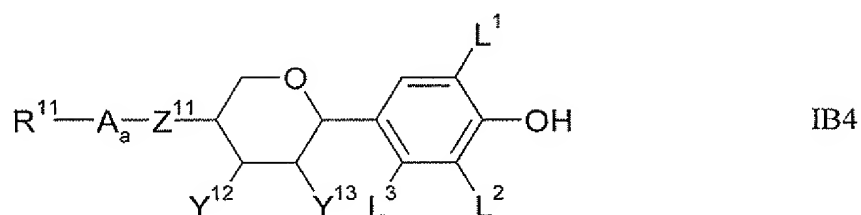
Y^{12} and Y^{13} , independently of one another, denote H or alkyl; and

R^{12} and R^{13} , independently of one another, denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(\text{CH}_2)_p-$ unit, where $p = 2, 3, 4, 5$ or 6 , where one, two or three of these CH_2 groups may be are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms;

characterised in that, comprising

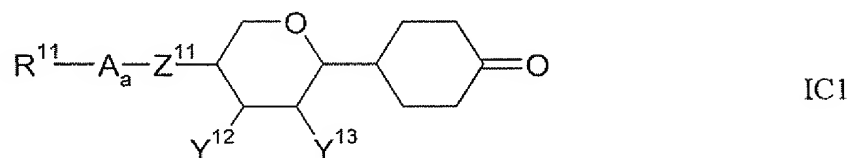
converting, in a reaction step (C1),

(C1) the a compound of the formula IB4



in which R^{11} , A, a , Z^{11} , Y^{12} and Y^{13} are as defined above for the compound of

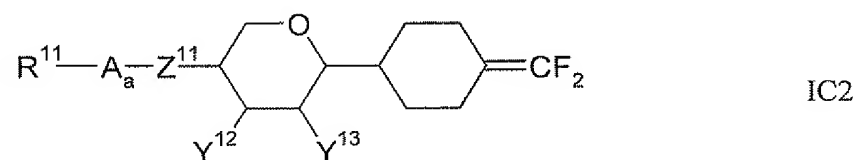
is converted into the a compound of formula IC1



using hydrogen in the presence of a transition-metal catalyst;

and optionally converting, in a reaction step (C2),

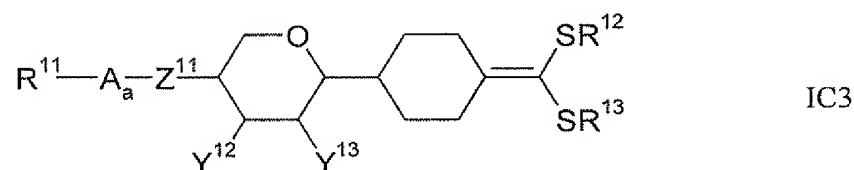
(C2) the compound of formula IC1 is converted into the a compound of formula IC2



by reaction with CF_2Br_2 in the presence of $\text{P}(\text{N}(\text{R}^{21})_2)_3$, $\text{P}(\text{N}(\text{R}^{21})_2)_2(\text{OR}^{22})$ or $\text{P}(\text{N}(\text{R}^{21})_2)(\text{OR}^{22})_2$, where R^{21} and R^{22} , independently of one another, are an alkyl radical having 1 to 15 carbon atoms;

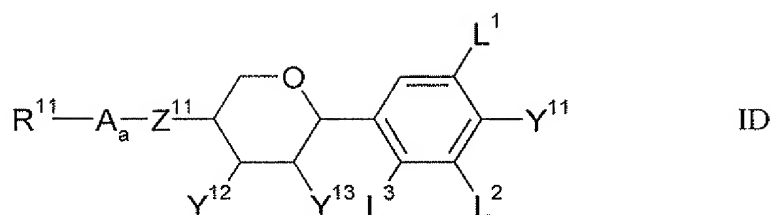
or optionally converting, in a reaction step (C2'),

(C2') the compound of the formula IC1 is converted into the a compound of formula IC3



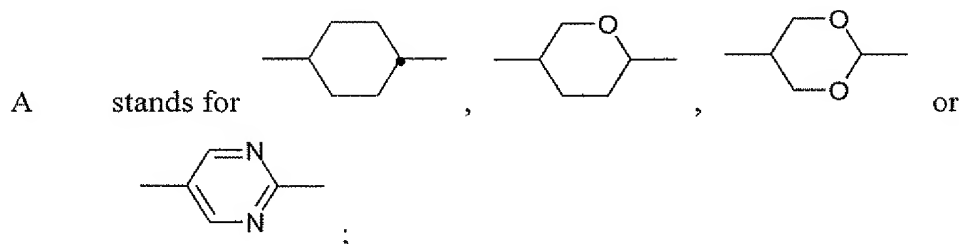
by reaction with $\text{CHG}(\text{SR}^{12})(\text{SR}^{13})$, in which G denotes $\text{P}(\text{OCH}_2\text{R}^{23})_3$, where R^{23} is a perfluorinated alkyl radical having 1 to 5 carbon atoms, or $\text{Si}(\text{CH}_3)_3$ or $\text{Si}(\text{CH}_2\text{CH}_3)_3$, and R^{12} and R^{13} are as defined above for the compound of formula IC, in the presence of a strong base.

16. (Withdrawn and Currently Amended) Process for the preparation of a A
process for preparing a compound of claim 1, which is a compound of the
formula ID



in which

R^{11} denotes H, F, Cl, Br, I, CN, aryl, heterocyclyl or alkyl;



a is 0, 1 or 2, where A can adopt identical or different meanings if a is 2;

Z^{11} represents a single bond, $-CH_2-CH_2-$, $-CF_2-CF_2-$, $-CF_2-CH_2-$, $-CH_2-CF_2-$, $-CH_2-O-$, $-O-CH_2-$, $-CF_2-O-$ or $-O-CF_2-$;

Y^{11} denotes $-CO_2H$ or $-C(=S^+R^{12})(-SR^{13})X^-$;

Y^{12} and Y^{13} , independently of one another, denote H or alkyl;

L^1 , L^2 and L^3 , independently of one another, denote H or F;

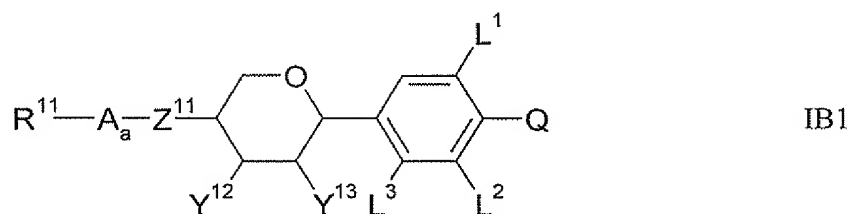
R^{12} and R^{13} , independently of one another, denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(CH_2)_p-$ unit, where $p = 2, 3, 4, 5$ or 6, where one, two or three of these CH_2 groups ~~may be~~ are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms; and

X^- is a weakly coordinating anion;

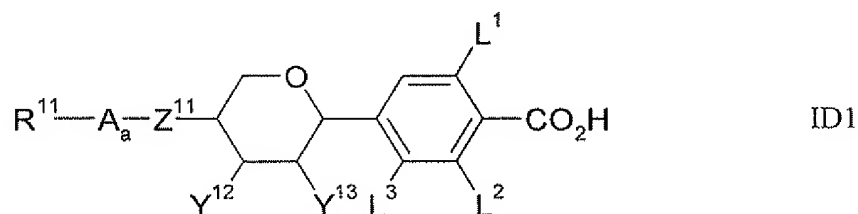
~~characterised in that, comprising~~

reacting, in a reaction step (D1),

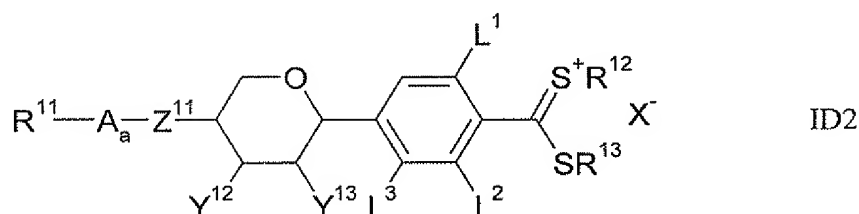
(D1) a compound of the formula IB1



in which R^{11} , A, a, Z^{11} , Y^{12} , Y^{13} , L^1 , L^2 and L^3 are as defined for the compound of formula ID, and Q denotes H or Br,
~~is reacted~~ with an organometallic base and CO_2 to give the a compound of formula ID1

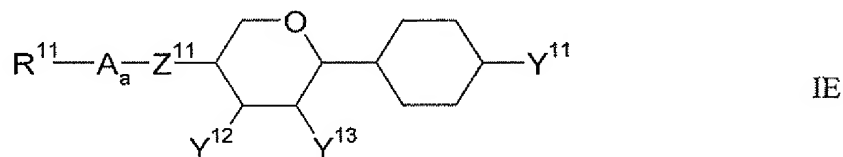


in which R^{11} , A, a, Z^{11} , Y^{12} , Y^{13} , L^1 , L^2 and L^3 are as defined for the compound of formula ID;
 and optionally converting, in a reaction step (D2),
 (D2) the compound of formula ID1 ~~is converted~~ into the a compound of formula ID2



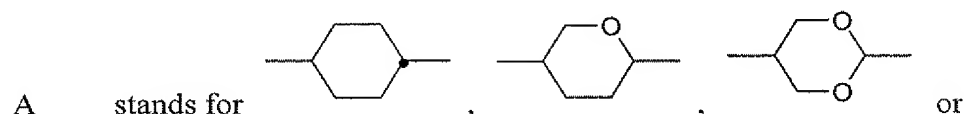
in the presence of an acid HX using HSR^{12} and HSR^{13} or using $HSR^{12}R^{13}SH$.

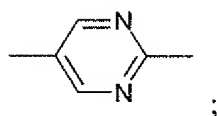
17. (Withdrawn and Currently Amended) ~~Process for the preparation of a A~~
process for preparing a compound of claim 1, which is a compound of the formula IE



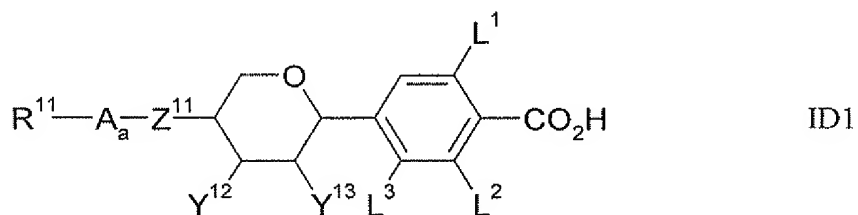
in which

R^{11} denotes H, F, Cl, Br, I, CN, aryl, heterocyclyl or alkyl;

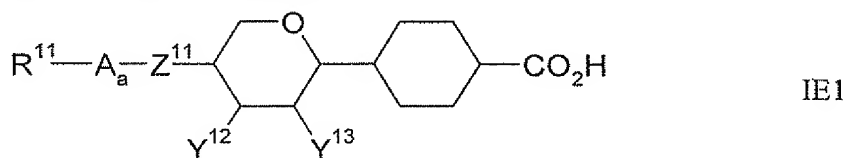




- a is 0, 1 or 2, where A can adopt identical or different meanings if a is 2;
 Z^{11} represents a single bond, $-\text{CH}_2-\text{CH}_2-$, $-\text{CF}_2-\text{CF}_2-$, $-\text{CF}_2-\text{CH}_2-$, $-\text{CH}_2-\text{CF}_2-$, $-\text{CH}_2-\text{O}-$, $-\text{O}-\text{CH}_2-$, $-\text{CF}_2-\text{O}-$ or $-\text{O}-\text{CF}_2-$;
 Y^{11} denotes $-\text{CO}_2\text{H}$ or $-\text{C}(=\text{S}^+\text{R}^{12})(-\text{SR}^{13})\text{X}^-$;
 Y^{12} and Y^{13} , independently of one another, denote H or alkyl;
 R^{12} and R^{13} , independently of one another, denote an unbranched or branched alkyl radical having 1 to 15 carbon atoms or together form a $-(\text{CH}_2)_p-$ unit, where $p = 2, 3, 4, 5$ or 6 , where one, two or three of these CH_2 groups may be are optionally substituted by at least one unbranched or branched alkyl radical having 1 to 8 carbon atoms; and
 X^- is a weakly coordinating anion;
 characterised in that, comprising
converting, in a reaction step (E1),
 (E1) the a compound of the formula ID1



in which R^{11} , A, a, Z^{11} , Y^{12} and Y^{13} are as defined above for the compound of
 formula IE, and L^1 , L^2 and L^3 denote H,
 is converted into the a compound of formula IE1



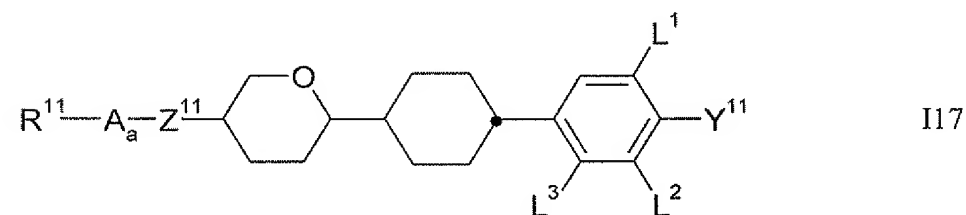
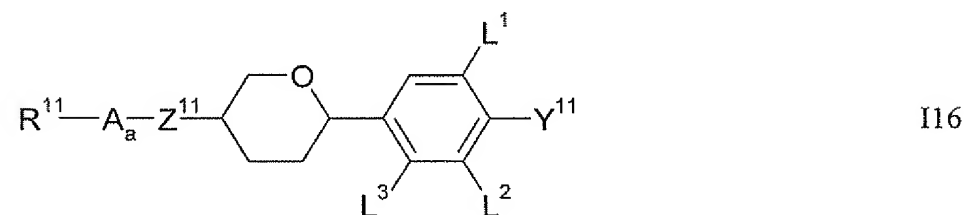
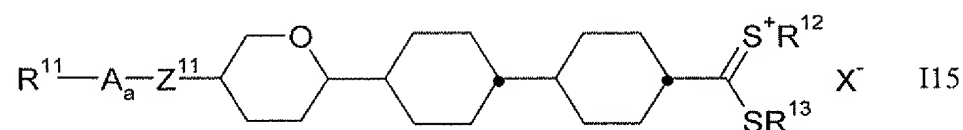
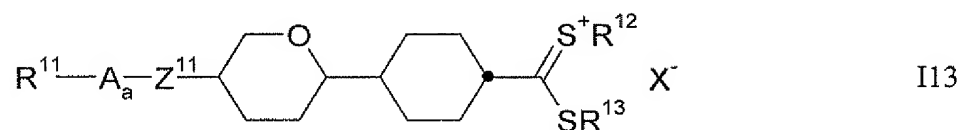
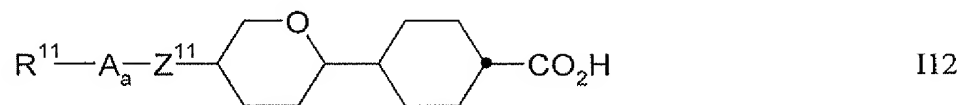
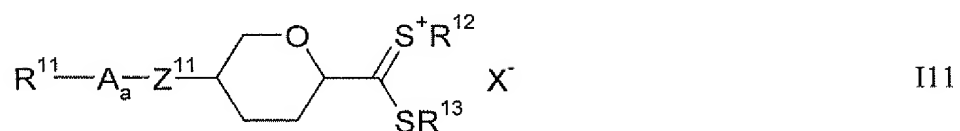
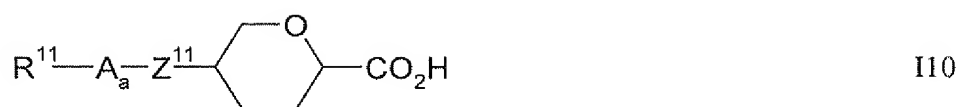
using hydrogen in the presence of a transition-metal catalyst;
 and optionally converting, in a reaction step (E2),
 (E2) the compound of the formula IE1 ~~is converted into the~~ a compound of
formula IE2



in the presence of an acid HX using HSR¹² and HSR¹³ or using HSR¹²R¹³SH.

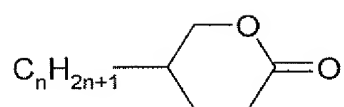
18. (New) A compound according to claim 1, which is a compound of one of the following formulae





wherein R^{11} , A, a, Z^{11} , Y^{11} , L^1 , L^2 , L^3 , R^{12} , R^{13} and X^- have the meanings indicated for the compound of formula I.

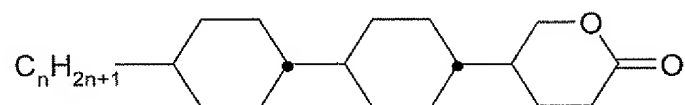
19. (New) A compound according to claim 1, which is a compound of one of the following formulae



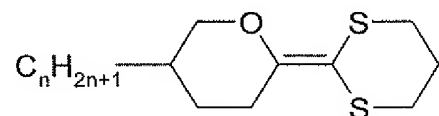
I1a



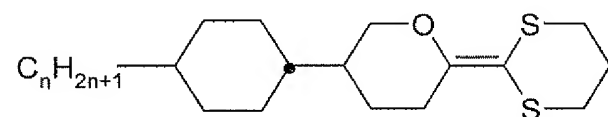
I1b



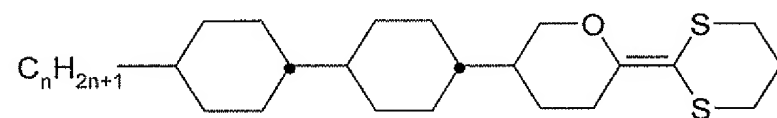
I1c



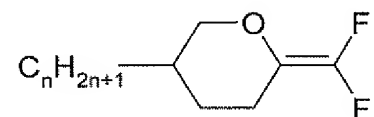
I2a



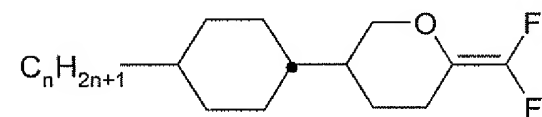
I2b



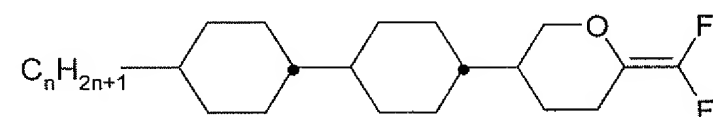
I2b



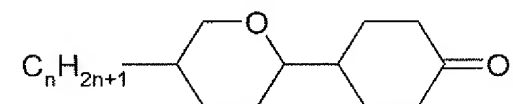
I3a



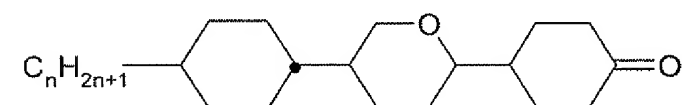
I3b



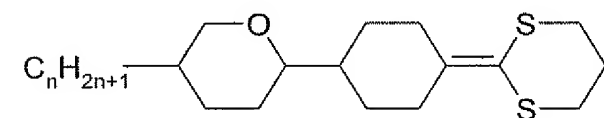
I3c



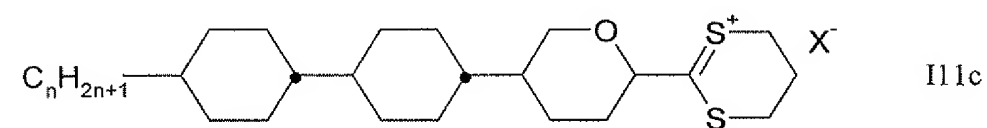
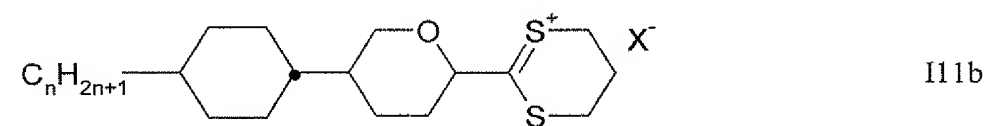
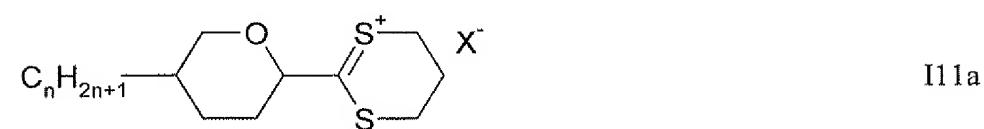
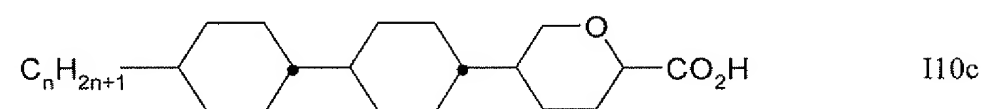
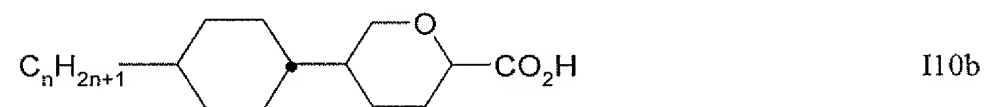
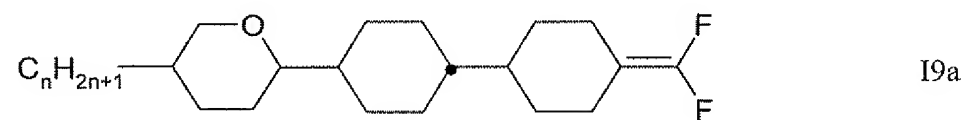
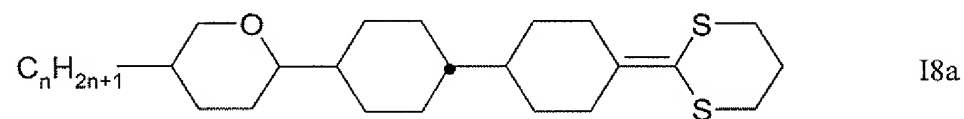
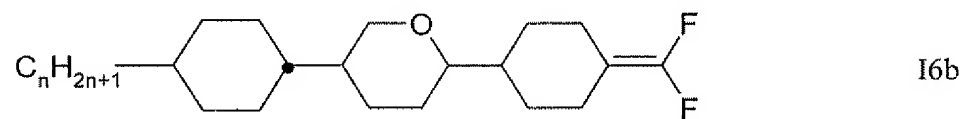
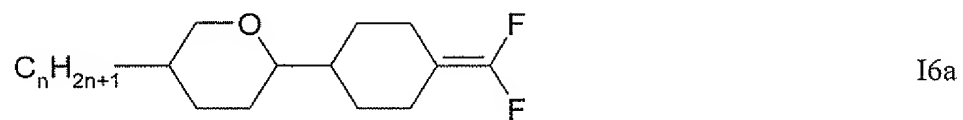
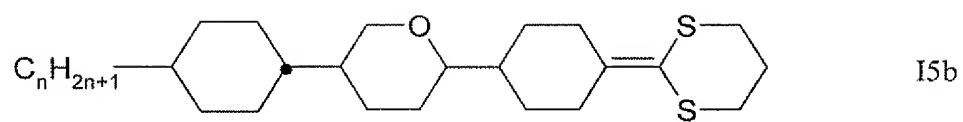
I4a

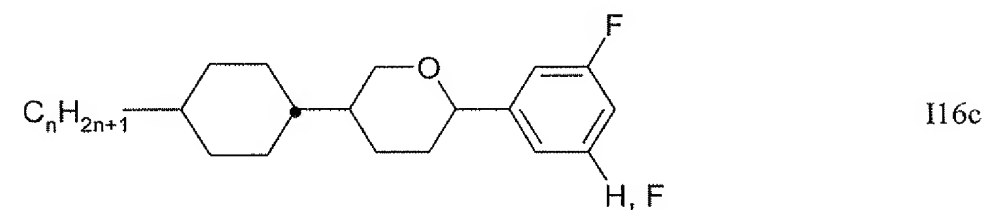
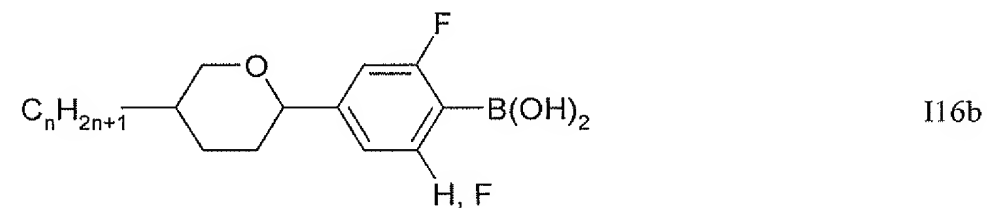
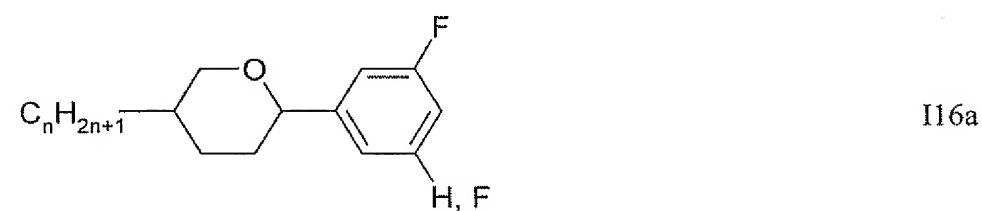
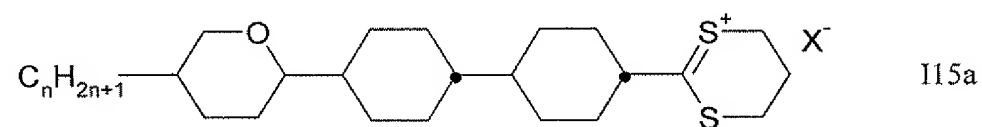
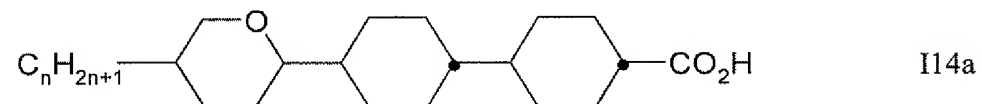
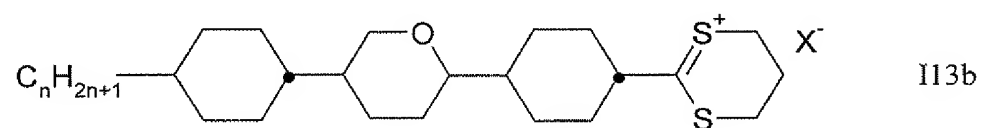
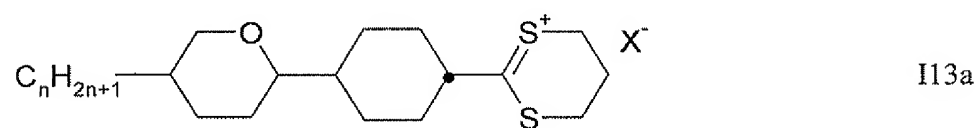
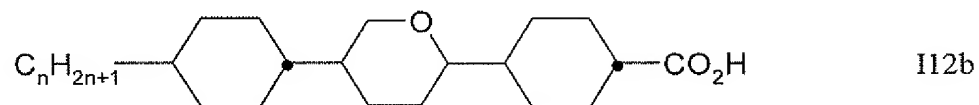
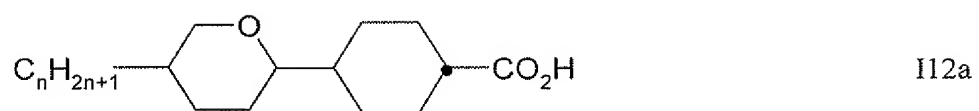


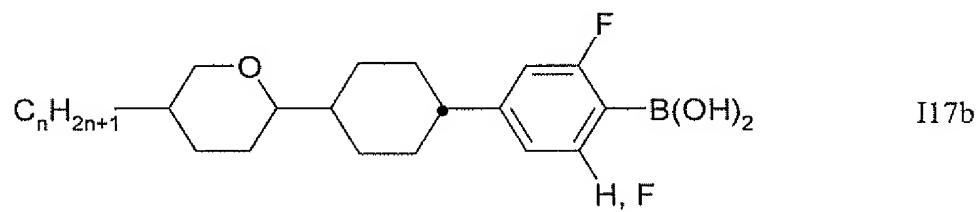
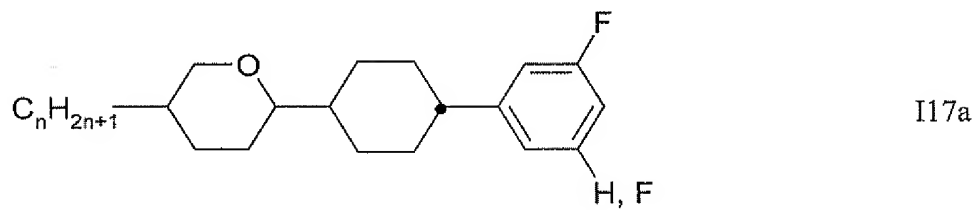
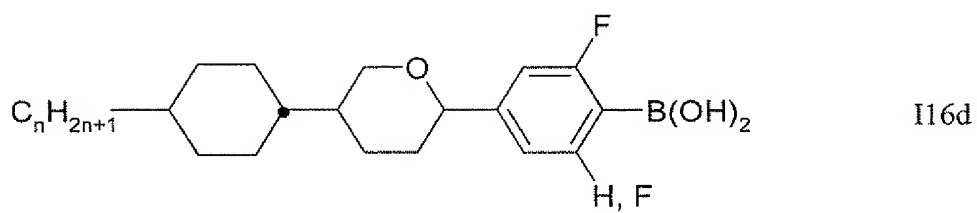
I4b



I5a







wherein n is an integer of 1 to 7.

20. (New) A compound according to claim 10, wherein C_nH_{2n+1} is straight-chain.